

Message

From: Fleisig, Erica [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=57317CE4C3234AFE86380BEAB9C70BD9-EFLEISIG]
Sent: 10/31/2019 3:48:42 PM
To: Soo-Hoo, Mimi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=9391898296224ab1a1fad30cc6d90ab3-Soo-Hoo, Mimi]
Subject: FW: For us to discuss on Monday
Attachments: OR and MI Mercury MDV Rationales_10 30 19.docx; RE: For Jim: OR and MI writeup; Comparison of MDVs_10 28 19.docx
Flag: Follow up

FYI, just so you know what I sent Heidi. We're talking Monday morning.

From: Fleisig, Erica
Sent: Thursday, October 31, 2019 11:23 AM
To: Nalven, Heidi <Nalven.Heidi@epa.gov>
Subject: For us to discuss on Monday

Hi Heidi,

This is the specific variance issue that Manjali has asked for your input on that I mentioned via IM today. We can talk more about it on Monday when we chat about process more generally. We have two mercury MDVs, one submitted (in Michigan) and one out for public comment (in Oregon). Both are factor 3, HAC3, but MI is 5 years (although MI has rolled over this 5-year variance several times) and OR is 20 years.

The first place to start is probably the Word file titled "Comparison of MDVs" – I pulled this together to help with our discussions with R7, as well as to compare PMPs to help with our Avon discussions (note that I did not add MT). For this purpose, you can just look at the MI and OR columns.

Secondly, you'll see from the email at the bottom of the chain and the attached email starting "for Jim" that we had some internal debate about whether we should:

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What's left is the "OR and MI Mercury MDV Rationales_10 30 19" Word file, which we've shared with R5 to see if they are comfortable:

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I can explain more on Monday how this all came about and why I didn't pull you in on OR sooner, but at this point this is mostly FYI and for you to give us any input on anything we might have missed.

Thanks!
-Erica

From: Fleisig, Erica
Sent: Wednesday, October 30, 2019 5:14 PM
To: Vican, Manjali <Vican.Manjali@epa.gov>; Dreyfus, Melissa G. <Dreyfus.Melissa@epa.gov>; Barash, Shari

<Barash.Shari@epa.gov>; Gravuer, Kelly <gravuer.kelly@epa.gov>

Cc: Keating, Jim <Keating.Jim@epa.gov>; Pettit, Elizabeth (Libby) <pettit.elizabetha@epa.gov>; Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>

Subject: RE: For NB input by 10/30 if poss: OR and MI writeup

Thanks Manjali –

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-Erica

From: Vican, Manjali <Vican.Manjali@epa.gov>

Sent: Wednesday, October 30, 2019 2:59 PM

To: Fleisig, Erica <Fleisig.Erica@epa.gov>; Dreyfus, Melissa G. <Dreyfus.Melissa@epa.gov>; Barash, Shari <Barash.Shari@epa.gov>; Gravuer, Kelly <gravuer.kelly@epa.gov>

Cc: Keating, Jim <Keating.Jim@epa.gov>; Pettit, Elizabeth (Libby) <pettit.elizabetha@epa.gov>; Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>

Subject: RE: For NB input by 10/30 if poss: OR and MI writeup

Hi everyone – thank you for putting this together. I was putting some notes down but turns out my thoughts are relatively basic. I still don't think

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Hope that helps. Thanks for putting it together.
Manjali

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Ms. Manjali Gupta Vican  
Team Leader, Uses and Antidegradation Team  
National Water Quality Standards Branch, SHPD  
Office of Science and Technology  
U.S. Environmental Protection Agency  
Washington, D.C.  
202-566-0373 (Phone)  
[vlcan.manjali@epa.gov](mailto:vlcan.manjali@epa.gov)

**From:** Fleisig, Erica

**Sent:** Monday, October 28, 2019 4:28 PM

**To:** Dreyfus, Melissa G. <Dreyfus.Melissa@epa.gov>; Vlcan, Manjali <Vlcan.Manjali@epa.gov>; Barash, Shari <Barash.Shari@epa.gov>; Gravuer, Kelly <gravuer.kelly@epa.gov>  
**Cc:** Keating, Jim <Keating.Jim@epa.gov>; Pettit, Elizabeth (Libby) <pettit.elizabetha@epa.gov>; Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>  
**Subject:** For NB input by 10/30 if poss: OR and MI writeup

NB folks,

I would appreciate your input on the attached 3-pager (summarized in Jim's email below) that will hopefully

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Thank you!  
-Erica

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**From:** Keating, Jim <Keating.Jim@epa.gov>  
**Sent:** Monday, October 28, 2019 2:04 PM  
**To:** Fleisig, Erica <Fleisig.Erica@epa.gov>; Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>; Pettit, Elizabeth (Libby) <pettit.elizabetha@epa.gov>  
**Subject:** RE: For Jim: OR and MI writeup

Hi all!

I am attaching my comments. The chart, the information, and the bubble comments helped crystallize my thinking. I think that

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As I said in one of my comments in the attachment, in either option, I think

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**From:** Fleisig, Erica <Fleisig.Erica@epa.gov>  
**Sent:** Monday, October 28, 2019 9:31 AM  
**To:** Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>; Pettit, Elizabeth (Libby) <pettit.elizabetha@epa.gov>  
**Cc:** Keating, Jim <Keating.Jim@epa.gov>  
**Subject:** RE: For Jim: OR and MI writeup

Yes, super helpful, thank you! Adding Jim here and re-attaching the writeup in the hopes that he has a chance to review today

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**From:** Soo-Hoo, Mimi <[Soo-Hoo.Mimi@epa.gov](mailto:Soo-Hoo.Mimi@epa.gov)>  
**Sent:** Sunday, October 27, 2019 8:24 AM  
**To:** Fleisig, Erica <[Fleisig.Erica@epa.gov](mailto:Fleisig.Erica@epa.gov)>; Pettit, Elizabeth (Libby) <[pettit.elizabetha@epa.gov](mailto:pettit.elizabetha@epa.gov)>  
**Subject:** RE: For Jim: OR and MI writeup

Thanks for putting this together, and for raising with SHM at check-in!

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Many of Michigan waters are not supporting designated uses for other indigenous aquatic life and wildlife, and/or fish consumption due to mercury in the water column and/or fish tissue. There are 76,421 river miles, 872,037 acres of inland lakes and reservoirs, 41,943 square miles of Great Lakes open water, 2,998 miles of Great Lakes shoreline, and 125 miles of connecting channels in Michigan. Michigan's draft 2018 Clean Water Act sections 303(d), 305(b), and 314 Integrated Report (IR) uses data from the fish contaminant and water chemistry monitoring programs, in addition to others, to assess specific surface waters impacted by mercury and other pollutants. The IR identifies 14,289 miles of rivers and streams, 272,741 acres of inland lakes and reservoirs, all of the Great Lakes open water and shorelines, and all of connecting channels in Michigan as not supporting one or more designated uses due to elevated concentrations of mercury in the ambient water column or in fish tissue (EGLE, 2019 in draft).

Information outlined in the MDV and further evaluated and explained in the Statewide Michigan Mercury Total Maximum Daily Load (TMDL), approved by USEPA in September 2018 (MDEQ, 2018), demonstrated that the human-caused condition of mercury air deposition, prevents the attainment of the existing use and cannot be remedied within the term of this variance. Atmospheric mercury deposition in Michigan accounts for 98.6% of the mercury load to Michigan surface waters, while NPDES discharges account for 1.4%. Atmospheric mercury deposition comes from local (in-state sources), regional, national, and global sources that are both anthropogenic (80%) and natural (20%) in origin (MDEQ, 2018). Most contributions to mercury deposition originate from outside Michigan. In-state sources make up 7.8% of the state's atmospheric mercury load (MDEQ, 2018). Atmospheric mercury deposition originating from sources within and outside of Michigan must be controlled in order to reduce concentrations of mercury in fish tissue to protect human health and wildlife.

Mimi Soo-Hoo  
Office of Science & Technology  
[Soo-Hoo.Mimi@epa.gov](mailto:Soo-Hoo.Mimi@epa.gov)  
(202) 566-1192

**From:** Fleisig, Erica <[Fleisig.Erica@epa.gov](mailto:Fleisig.Erica@epa.gov)>  
**Sent:** Friday, October 25, 2019 4:08 PM  
**To:** Pettit, Elizabeth (Libby) <[pettit.elizabetha@epa.gov](mailto:pettit.elizabetha@epa.gov)>; Soo-Hoo, Mimi <[Soo-Hoo.Mimi@epa.gov](mailto:Soo-Hoo.Mimi@epa.gov)>  
**Subject:** FW: For Jim: OR and MI writeup

Hi guys,

Jim is going to try to review this on Monday, but I wanted to share with you both as well and note that I'm going to mention it quickly to Sara at the variance check-in on Monday

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Let me know if you have any input on this, thanks!

**From:** Fleisig, Erica  
**Sent:** Thursday, October 24, 2019 8:56 PM  
**To:** Keating, Jim <keating.jim@epa.gov>  
**Subject:** For Jim: OR and MI writeup

Jim,

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**From:** Johnson, Aaron <Johnson.AaronK@epa.gov>  
**Sent:** Thursday, September 26, 2019 10:21 AM  
**To:** Soo-Hoo, Mimi <Soo-Hoo.Mimi@epa.gov>; Fleisig, Erica <Fleisig.Erica@epa.gov>; Vican, Manjali <Vican.Manjali@epa.gov>; Dreyfus, Melissa G. <Dreyfus.Melissa@epa.gov>; Keating, Jim <Keating.Jim@epa.gov>  
**Cc:** Pfeifer, David <pfeifer.david@epa.gov>; Bauer, Candice <bauer.candice@epa.gov>; Prichard, Gary <prichard.gary@epa.gov>  
**Subject:** MI Hg MDV Factor 3

Hi all,

I've got another variance riddle for you all.

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Thoughts or major objections?

Aaron

Aaron Johnson  
Water Quality Standards Specialist  
USEPA | Region 5  
312-886-6845